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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/653,929
Filing Date: September 04, 2003
Appellant(s): SONG, CHUN-HEE

Dion R. Ferguson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 16, 2008 appealing from the Office action mailed September 12, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Patents:

2001/0033736	Yap, et al.	10-2001

2002/0081090	Agnihotri, et al.	6-2002
6,854,127	Kanemitsu	2-2005

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yap, et al., U.S. Pat. Pub. No. 2001/0033736 (Reference A of the PTO-892 part of paper no. 20070322) in view of Agnihotri, et al., U.S. Pat. Pub. No. 2002/0081090 (Reference B of the PTO-892 part of paper no. 20070322).

As per claim 1, Yap, et al. teaches a method of preventing a duplicate recording of a broadcasting program, comprising: extracting additional information from a digital broadcasting program (¶ 0131) and recording the additional information in an additional storage unit (¶ 0133), the additional information including title and summary information (¶ 0131); before entering a recording mode, reading the additional information corresponding to a to-be-recorded broadcasting program from the additional information storing unit (¶ 0131); searching a recording unit and determining whether the recording unit stores title information corresponding to the to-be-recorded broadcasting program (¶ 0133); if the title information corresponding to the to-be-recorded broadcasting program is detected from the recording unit, comparing summary information included in the read additional information with that stored in the recording unit in connection with the detected title information (¶ 0134); and entering the recording mode to enable recording of the to-be-recorded broadcasting program on the recording unit (¶ 0139).

Yap, et al. does not explicitly state that the additional information is recorded separately; which is taught by Agnihotri, et al. (¶ 0053). It would have been prima facie obvious at the time of invention to separate the additional information because a claimed invention that differs from the prior art only in terms of its ability to separate is prima facie obvious if it merely yields a predictable result. *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961). Yap, et al. does not teach calculating a correspondence ratio; comparing the calculated correspondence ratio with a predetermined reference value, and if the correspondence ratio is less than the predetermined reference value, entering the recording mode to enable recording of the to-be-recorded broadcasting program on the recording unit. Agnihotri, et al. teaches calculating a correspondence ratio (¶ 0058); comparing the calculated correspondence ratio with a predetermined reference value (¶ 0060), and if the correspondence ratio is less than the predetermined reference value, recording of the program on the recording unit (¶ 0063). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the above teachings of Agnihotri, et al. into the method taught by Yap, et al. in order to match already-recorded programs (as taught by Agnihotri, et al., ¶ 0057). Agnihotri, et al. teaches that the comparison occurs after recording has already begun rather than the comparison occurs before recording; however Yap, et al. teaches the comparison occurring before recording begins (¶ 0133).

As per claim 2, Yap, et al. in view of Agnihotri, et al. teaches the method of claim 1 as described above. Yap, et al. further teaches the title information includes sub-title information (¶ 0131).

As per claim 3, Yap, et al. in view of Agnihotri, et al. teaches the method of claim 1 as described above. Yap, et al. further teaches producing a message informing that there is a broadcasting program already recorded in the recording unit, which broadcasting program may be identical to the to-be-recorded broadcasting program (¶ 0133). Agnihotri, et al. further teaches determining whether or not to take action if the correspondence ratio is greater than the predetermined reference value (¶ 0060). It would have been prima facie obvious to one having ordinary skill in the art at the time of

invention to incorporate the above teachings of Agnihotri, et al. into the method taught by Yap, et al. in view of Agnihotri, et al. because using a correspondence ratio is one way to determine if a program has already been recorded (as taught by Agnihotri, et al., ¶¶ 0055-58).

As per claim 9, Yap, et al. teaches a method of preventing duplicate recording of a broadcasting program, comprising: extracting additional information from a digital broadcasting program (¶ 0131) and recording the additional information in an additional storage unit (¶ 0133), the additional information including title and summary information (¶ 0131); before executing a recording command, reading the additional information corresponding to a to-be-recorded broadcasting program from the additional information storing unit (¶ 0131); searching a recording unit and determining whether the recording unit stores title information corresponding to the to-be-recorded broadcasting program (¶ 0133); and if the title information corresponding to the to-be-recorded broadcasting program is detected from the recording unit, halting the recording (¶ 0135). Yap, et al. does not explicitly state that the additional information is recorded separately; which is taught by Agnihotri, et al. (¶ 0053). It would have been prima facie obvious at the time of invention to separate the additional information because a claimed invention that differs from the prior art only in terms of its ability to separate is prima facie obvious if it merely yields a predictable result. *Dulberg*, 289 F.2d at 523. Yap, et al. does not explicitly teach that the halting of the recording is done by ignoring the recording command; which is taught by Agnihotri, et al. (¶ 0062). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the above teachings of Agnihotri, et al. into the method taught by Yap, et al. in order to prevent re-recording of the same program (as taught by Agnihotri, et al., ¶ 0017).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yap, et al. in view of Agnihotri, et al. as applied to claim 9 above, in further view of Kanemitsu, U.S. Pat. No. 6,854,127 (Reference C of the PTO-892 part of paper no. 20070322).

As per claim 10, Yap, et al. in view of Agnihotri, et al. teaches the method of claim 9 as described above. Yap, et al. in view of Agnihotri, et al. does not teach the title information includes information on a sequence number of the to-be-recorded broadcasting program; which is taught by Kanemitsu (column 5, lines 54-61). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the above teachings of Kanemitsu into the method taught by Yap, et al. in view of Agnihotri, et al. because sequence information is used to identify specific content (as taught by Kanemitsu, column 2, lines 50-53).

(10) Response to Argument

Appellant's arguments do not establish that the applied rejections under § 103(a) were made in error, and the rejections should be maintained. Appellant argues that the primary reference is deficient to teach the recited "extracting" step; however, as demonstrated below, this argument is based upon both a claim construction that is not supported by the Specification and a limited characterization of the primary reference's full disclosure.

A. A proper construction of the claimed "extracting" step reads on the disclosed extracting of Yap, et al.

The disputed claim limitation is found in both independent claims: "extracting additional information from a digital broadcasting program. . . ." As a threshold matter, appellant provides no preferred interpretation of the limitation. The Summary of Claimed Subject matter of the Appeal Brief identifies Specification, page 8, lines 16-20 as providing support for the "extracting" step.

> The additional information data, such as EPG information data, is converted to graphic signals through the graphic signal processor and the converted graphic signals are transmitted to the display device through the A/V signal processor. Further, the additional information data separated through the demultiplexer is stored in the additional information storing unit. If the additional information data already stored in the additional information storing unit is different from that currently received, the existing additional information data is updated with the currently received data.

Specification, ¶¶ 22-23 (page 8, lines 12-20) (line break and reference characters omitted). For purposes of comparison, the cited passage of the primary reference, Yap, similarly discloses the following:

> As described above in conjunction with FIG. 3, a user may select a single or multiple recorded events from a program guide or scheduler, such EPG, for viewing based on actors, actresses, directors, program title, key words, key phrases, synopsis, release date, critical review, related programs, sequels, a thumbnail, a preview, a snippet, or other information concerning or relating to the content. In one embodiment, the user activates this "intelligent agent" feature via an input device such as a remote control. For example, the user may display the EPG on the screen of a display unit, such as first display or second display unit and activate one or more menu screens for entering key word information such as the tag information described above or phrases that the user has pre-assigned to programs.

Yap, ¶ 0131 (reference characters omitted). The only difference present is in where the additional information is stored (addressed below). The origin of the "tag information" in Yap is described in further detail elsewhere in the reference:

> Enhancing the electronic program guide are tags. A tag includes data that is associated with or otherwise describes content. For example, a tag may indicate which actors are in a particular movie, the director of the movie, a synopsis of the movie, when it was released, critical reviews of the movie, related programs, sequels, keywords, a thumbnail, a preview, a snippet, or other information concerning or relating to the content. The tags may be in-band or otherwise transmitted along with the content. Alternatively, the tags may be associated with the program or otherwise sent separately such as with an electronic program guide.

Yap, ¶ 0060 (emphasis added, reference characters omitted).

Appellant argues that the electronic program guide ("EPG") in Yap is an "outside source" that somehow disqualifies it from service as the supplier of the additional information. Appeal Brief, page 11. This limited interpretation is plainly contrary to the broader disclosure presented above. This argument is also confusing because an EPG similar to the one disclosed in Yap is explicitly used in appellant's own Specification as additional information. Specification, ¶ 23 (presented above).

With respect to the initial gathering of the additional information (or "tags"), Yap discloses a number of embodiments in paragraph 0060 above. In one embodiment, the information is taken in-band from the signal received at the recording unit. This corresponds directly to the "extracting" that occurs in the present invention. "The

additional information storing unit 107 stores additional information, including the program information and the system information extracted from the digital broadcasting signals." Specification, ¶ 16 (emphasis added). However, rather than this embodiment which is supported by the Specification, appellant seems to be arguing that the claims recite some sort of extraction that occurs subsequent to the demultiplexing/signal processing actually disclosed in the Specification (¶¶ 21-24). But this can only be presumed because, as noted above, appellant has provided no preferred interpretation of the "extracting" step, only a conclusory judgment that under some undefined proper construction, Yap is deficient. Even so, this interpretation would still read on the other examples of extracting in Yap shown above (i.e., the tags associated with the program or otherwise sent along with an EPG). Simply because Yap does not use the word "extracting" it does not follow that no extraction of additional information takes place. Identity of terminology is not a requirement of the prior art. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Accordingly, properly construed in light of the Specification, the "extracting" step reads on the actual disclosure of Yap and this limitation is met by the cited art.

B. Yap, et al. discloses both title and summary information are used to determine duplicate programs.

Appellant presents an additional argument in the Appeal Brief, that Yap is not sufficient to teach that both title and summary information are used to identify duplicate programs. However, this argument is also premised upon a limited reading of Yap.

Appellant argues that "there is no indication in Yap that *two separate* characteristics are used in determining if a duplicate program exists. Rather, Yap discloses only that if a match of the checked characteristic is found, then a notification is provided to the user." Appeal Brief, page 13 (emphasis in original). This is an overly strained reading of Yap, which actually discloses: "[i]n order to identify a match, characteristics such as the tag information . . . may be compared. In one exemplary embodiment, the first display unit . . . may display the characteristics of the selected

program to record with the best match in memory . . . ." Yap, ¶ 0134 (emphasis added). Thus, the reference does not limit the disclosure to an embodiment in which only a single characteristic is used, and one skilled in the art would not interpret this passage as such. Rather, it is readily apparent that any or all of the multiple forms of tag information can be used to identify a match, in accordance with the user's preferences.

C. Yap., et al. in view of Agnihotri, et al. properly renders the independent claims unpatentable under § 103(a).

The rejections and arguments above demonstrate that Yap teaches most aspects of the claimed invention. As has been acknowledged throughout prosecution, Yap does not teach that the additional information is recorded separately from the program, although it does disclose multiple memory storage devices (¶ 0129). Agnihotri teaches that additional information is recorded separately (¶ 0053). Modifying the already present hardware of Yap to record separately as in Agnihotri would only require routine engineering. Moreover, it is merely a combination of old elements. In the combination each element would perform the same function as it did separately, and one skilled in the art would have recognized that the results of the combination were predictable. Accordingly, the invention described by the independent claims is obvious in view of the cited art.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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